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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,266	06/20/2003	Fumitoshi Asai	17620-105003	7488

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EXAMINER	
ROYDS, LESLIE A	

ART UNIT	PAPER NUMBER
1614	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptomailnyc@kslaw.com

Office Action Summary	Application No.	Applicant(s)	
	10/600,266	ASAI ET AL.	
	Examiner	Art Unit	
	Leslie A. Royds Draper	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 November 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *19Nov10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-5 are presented for examination.

Prosecution on the merits of this application is reopened on claims 1-5, which are considered unpatentable for the reasons set forth infra.

Applicant's Information Disclosure Statement (IDS) filed November 19, 2010 (one page) has been received and entered into the present application. As reflected by the attached, completed copy of form PTO/SB/08, the Examiner has considered the cited references.

Claim Rejections - 35 USC § 112, Second Paragraph (New Grounds of Rejection)

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Present claim 1 is directed to a pharmaceutical composition consisting essentially of 2-acetoxy-5-(α-cyclopropylcarbonyl-2-fluorobenzyl)-4,5,6,7-tetrahydrothieno[3,2-c]pyridine or a pharmaceutically acceptable salt thereof, and aspirin, in a ratio by weight of 1:500 to 500:1 and, optionally, a pharmaceutically acceptable excipients.

The phrase "a pharmaceutically acceptable excipients" renders the claim indefinite because the term "a" circumscribes the incorporation of a singular pharmaceutically acceptable excipient, but the term "excipients" clearly circumscribes the incorporation of more than one pharmaceutically acceptable excipient. As a result of this ambiguity in the claim, it is unclear if the instantly claimed invention may contain one pharmaceutically acceptable excipient or more than one pharmaceutically acceptable excipient and, thus, one of ordinary skill in the art at the time of the invention would not have been

reasonably apprised of the metes and bounds of the subject matter for which Applicant is presently seeking protection. Clarification is required.

Furthermore, the limitation "said pharmaceutically acceptable excipient" as recited in instant claim 2 lacks antecedent basis in the instant claims because the preceding text of the claim, or the claim from which it depends, fails to recite any limitation directed to "pharmaceutically acceptable excipient" (in the singular form) per se. Clarification is required.

For these reasons, the claims fail to meet the tenor and express requirements of 35 U.S.C. 112, second paragraph, and are, thus, properly rejected.

Claim Rejections - 35 USC § 102 (New Grounds of Rejection)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogletree (U.S. Patent No. 6,509,348; Issued January 2003, Filed October 1999).

Ogletree teaches a combination of an ADP-receptor blocking anti-platelet drug and a thromboxane A_2 receptor antagonist, and optionally aspirin, for the inhibition of platelet aggregation and thrombus formation (col.4, l.18-24), wherein the ADP-receptor blocking anti-platelet drug that inhibits ADP-induced platelet aggregation may be, inter alia, CS-747 (col.4, l.25-30), which is the compound 2-acetoxy-5-(α-cyclopropylcarbonyl-2-fluorobenzyl)-4,5,6,7-tetrahydrothieno[3,2-c]pyridine and pharmaceutically acceptable salts thereof (col.4, l.38-41), and further wherein the aspirin may be

employed in a daily dosage within the range of from about 20 mg to about 5000 mg, preferably from about 40 mg to about 500 mg, and in a weight ratio to the ADP-receptor blocking antiplatelet drug within the range of from about 50:1 to about 0.5:1, preferably from about 25:1 to about 1:1 (col.31, l.32-37). Ogletree further teaches that the compositions are compounded according to accepted pharmaceutical practice with a physiologically acceptable vehicle, carrier, excipient, etc. (col.32, l.11-17).

Note that instant claim 1 is defined as "consisting essentially of" the claimed pyridine compound and aspirin. MPEP §2111.03[R-3] states that, "The transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. In re Herz, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976) ... For the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising." See, e.g., PPG, 156 F.3d at 1355, 48 USPQ2d at 1355 ... See also AK Steel Corp. v. Sollac, 344 F.3d 1234, 1240-41, 68 USPQ2d 1280, 1283-84 (Fed. Cir. 2003) ... If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. In re De Lajarte, 337 F.2d 870, 143 USPQ 256 (CCPA 1964). See also Ex parte Hoffman, 12 USPQ2d 1061, 1063-64 (Bd. Pat. App. & Inter. 1989)." In the instant case, absent a clear indication in the specification or claims of exactly what the basic and novel characteristics of the instant invention are, the instant claims do not clearly exclude the incorporation of the thromboxane A_2 receptor antagonist, absent factual evidence to the contrary.

Furthermore, there is no clear exclusion, either in the instant claims and/or specification, that the limitation directed to incorporation of a "pharmaceutically acceptable excipient" would not reasonably

circumscribe the inclusion of the thromboxane A_2 receptor antagonist as a vehicle, or excipient, for the pyridine compound and aspirin component, absent factual evidence to the contrary.

Claim Rejections - 35 USC § 103 (New Grounds of Rejection)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogletree (U.S. Patent No. 6,509,348; Issued January 2003, Filed October 1999) in view of Koike et al. (U.S. Patent No. 5,288,726; 1994).

Ogletree teaches a combination of an ADP-receptor blocking anti-platelet drug and a thromboxane A_2 receptor antagonist, and optionally aspirin, for the inhibition of platelet aggregation and thrombus formation (col.4, l.18-24), wherein the ADP-receptor blocking anti-platelet drug that inhibits ADP-induced platelet aggregation may be, inter alia, CS-747 (col.4, l.25-30), which is the compound 2-acetoxy-5-(α-cyclopropylcarbonyl-2-fluorobenzyl)-4,5,6,7-tetrahydrothieno[3,2-c]pyridine and pharmaceutically acceptable salts thereof (col.4, l.38-41), and further wherein the aspirin may be

employed in a daily dosage within the range of from about 20 mg to about 5000 mg, preferably from about 40 mg to about 500 mg, and in a weight ratio to the ADP-receptor blocking antiplatelet drug within the range of from about 50:1 to about 0.5:1, preferably from about 25:1 to about 1:1 (col.31, l.32-37). Ogletree further teaches that the compositions are compounded according to accepted pharmaceutical practice with a physiologically acceptable vehicle, carrier, excipient, etc. (col.32, l.11-17).

Note that instant claim 1 is defined as "consisting essentially of" the claimed pyridine compound and aspirin. MPEP §2111.03[R-3] states that, "The transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. In re Herz, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976) ... For the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising." See, e.g., PPG, 156 F.3d at 1355, 48 USPQ2d at 1355 ... See also AK Steel Corp. v. Sollac, 344 F.3d 1234, 1240-41, 68 USPQ2d 1280, 1283-84 (Fed. Cir. 2003) ... If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. In re De Lajarte, 337 F.2d 870, 143 USPQ 256 (CCPA 1964). See also Ex parte Hoffman, 12 USPQ2d 1061, 1063-64 (Bd. Pat. App. & Inter. 1989)." In the instant case, absent a clear indication in the specification or claims of exactly what the basic and novel characteristics of the instant invention are, the instant claims do not clearly exclude the incorporation of the thromboxane A_2 receptor antagonist, absent factual evidence to the contrary.

Furthermore, there is no clear exclusion, either in the instant claims and/or specification, that the limitation directed to incorporation of a "pharmaceutically acceptable excipient" would not reasonably

circumscribe the inclusion of the thromboxane A_2 receptor antagonist as a vehicle, or excipient, for the pyridine compound and aspirin component, absent factual evidence to the contrary.

Ogletree fails to specifically teach the use of the hydrochloride or maleate salt(s) of the compound 2-acetoxy-5-(a-cyclopropylcarbonyl-2-fluorobenzyl)-4,5,6,7-tetrahydrothieno[3,2-c]pyridine (claims 4-5).

Koike et al. teaches tetrahydrothienopyridine compounds and salts thereof (abstract), including the specifically named compound 2-acetoxy-5-(α-cyclopropylcarbonyl-2-fluorobenzyl)-4,5,6,7-tetrahydrothieno[3,2-c]pyridine (col.22, l.19-21), wherein Koike et al. discloses that the compounds may be formulated in pharmaceutically acceptable acid addition salts, including, inter alia, the hydrochloric acid addition salt (i.e., hydrochloride salt) or the maleic acid addition salt (i.e., maleate salt) (col.13, l.43-63).

One of ordinary skill in the art at the time of the invention would have found it prima facie obvious to employ the hydrochloride and/or maleate salt of the compound 2-acetoxy-5-(α-cyclopropylcarbonyl-2-fluorobenzyl)-4,5,6,7-tetrahydrothieno[3,2-c]pyridine in the composition disclosed by Ogletree because Koike et al. teaches that the hydrochloride or maleate salt is one of a finite number of pharmaceutically acceptable salts of the compound 2-acetoxy-5-(α-cyclopropylcarbonyl-2-fluorobenzyl)-4,5,6,7-tetrahydrothieno[3,2-c]pyridine that were known in the art at the time of the invention to predictably function as tetahydrothienopyridine inhibitors of blood platelet aggregation. In other words, one of ordinary skill in the art at the time of the invention would have found it prima facie obvious to employ any of the known pharmaceutically acceptable salts of the compound 2-acetoxy-5-(α-cyclopropylcarbonyl-2-fluorobenzyl)-4,5,6,7-tetrahydrothieno[3,2-c]pyridine (which, as evidenced by Koike et al., included the hydrochloride and/or maleate salts) into this formulation of Ogletree with a reasonable expectation of success because (1) a person with ordinary skill in the art has good reason to pursue known options within his or her technical grasp and (2) Ogletree teaches the equivalency of using

the compound 2-acetoxy-5-(α-cyclopropylcarbonyl-2-fluorobenzyl)-4,5,6,7-tetrahydrothieno[3,2-c]pyridine or known pharmaceutically acceptable salt(s) thereof as part of the disclosed pharmaceutical composition.

Conclusion

Rejection of claims 1-5 is proper.

No claims of the present application are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie A. Royds Draper whose telephone number is (571)-272-6096. The examiner can normally be reached on Monday-Friday (9:00 AM-5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on (571)-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Leslie A. Royds Draper/
Primary Examiner, Art Unit 1614

February 9, 2011